a probe being operatively connected with the scale graduation and being supplied with electric power over a plurality of electrical connections;

an electronic module being electrically coupled to the probe;

a housing of the electronic module for shielding the electronic module from the surroundings, with at least parts of the probe being disposed outside the housing; and

means for limiting the supply of current to the probe, wherein at least one fuse is provided in the electrical connections, leading to the probe, within the housing, for interrupting the flow of current to the probe when the temperature produced as a result of the current flow exceeds a specific value, wherein the at least one fuse is formed by a sectional constriction of a cross section of the electrical connections and the electrical connections comprise conductor strips and wherein the housing of the electronic module further forms the housing of the at least one fuse.

REMARKS

Entry of the foregoing Amendment is respectfully requested.

Based on the foregoing amendments and the following remarks, the application is deemed to be in condition for allowance and action to that end is respectfully requested.

The Examiner has rejected claims 1,3, 4, 8 and 9, under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent No. 4,470,873 (Nakamura) in view of Japanese Patent No. 11-273520 (Yoshikawa), U.S. Patent No. 4,831,484 (Bruch) and BEI Motion Systems Company (Optical Encoder Design Guide). The Examiner has rejected claims 5 and 7, under 35 U.S.C.